



Headquarters U.S. Air Force

eLog21: AF Logistics Transformation LogEA Business Case Review



March 10, 2004

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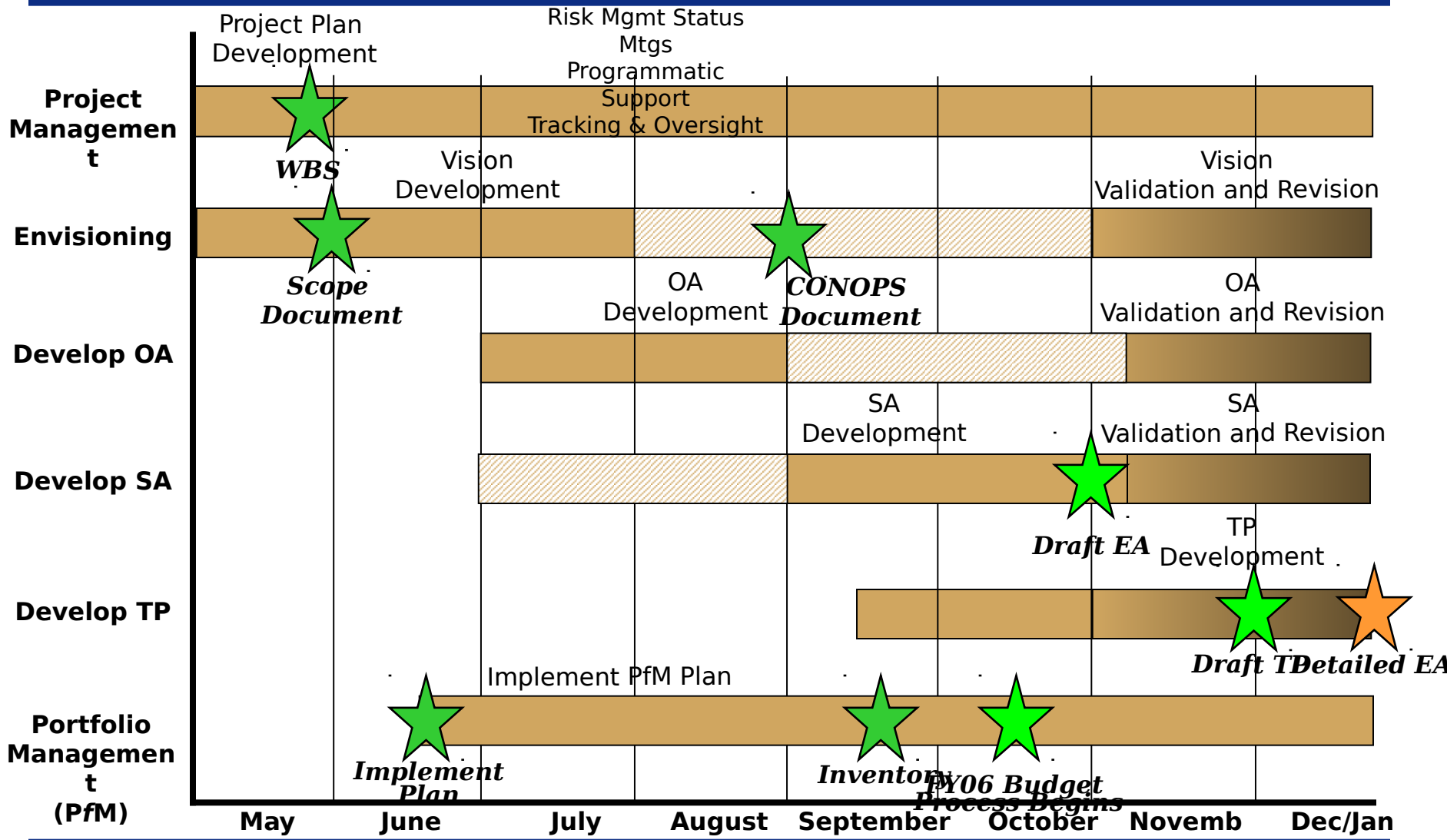
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AF eLog21 LogEA Effort



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= Delivered

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= Deliverable

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Operational Architecture



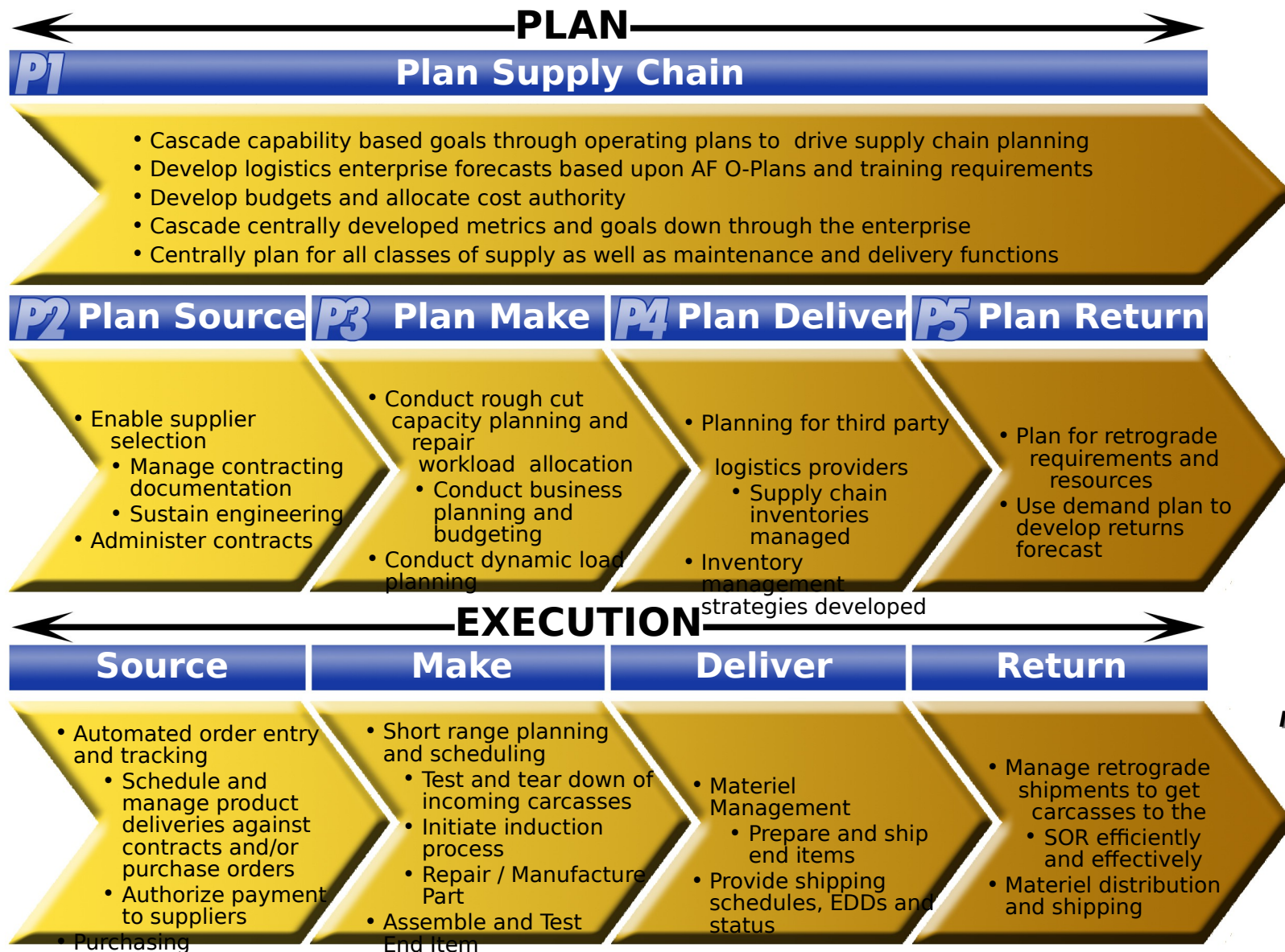
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Future State Architecture addresses the eLog21 Concepts



More OA Detail

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High Level Current State Systems Architecture



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Current systems cost breakdown



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High Profile Systems Compared to Total System Inventory

BearingPoint

System Category (FUNCTIONAL AREA)	All Identified Systems	All Systems in Scope*	High Profile Systems in Scope**	# of High Profile Systems in Scope	% High Profile Systems in Scope vs. Total Systems in Scope	% High Profile Systems in Scope vs. Total in Scope Category
CIVIL ENGINEERING	\$ 143,086,600					
COMMUNICATION OPERATIONS	\$ 14,443,465					
INNOVATION AND TRANSFORMATION	\$ 2,977,953	\$2,977,953	\$ 499,616	2	0%	17%
LOGISTICS PLANNING	\$ 271,323,299	\$260,783,166	\$ 203,442,504	28	7%	78%
MAINTENANCE	\$ 1,298,162,845	\$1,176,990,920	\$ 1,105,153,519	60	39%	94%
MUNITIONS	\$ 24,893,161	\$24,893,161	\$ 22,140,161	4	1%	89%
OTHER	\$ 256,345,143	\$256,345,143	\$ 240,496,067	17	8%	94%
RESOURCES	\$ 7,769,207					
SERVICES	\$ 35,309,426		\$ 750,000	1	0%	
SUPPLY	\$ 1,029,434,983	\$1,029,434,983	\$ 1,025,054,198	58	36%	100%
TRANSPORTATION	\$ 91,119,888	\$90,989,238	\$ 90,327,000	3	3%	99%
TOTAL \$\$	\$3,174,865,969	\$2,842,414,563	\$ 2,687,863,065	173	95%	95%
TOTAL NUMBER OF SYSTEMS	659	515	170	173		

% of Systems \$\$ in Scope / Total \$\$s	90%
% \$\$ in 173 systems/ \$\$ in Scope	95%
% \$\$ in 173 systems/ Total \$\$s	85%

*Note: "in Scope" means that the following Categories (FUNCTIONAL_AREA) that are 'out of scope' have been removed:
Civil Engineering, Communication Operations, Services and Resources

*** High Profile Systems in Scope were compiled using the following criteria/filters:

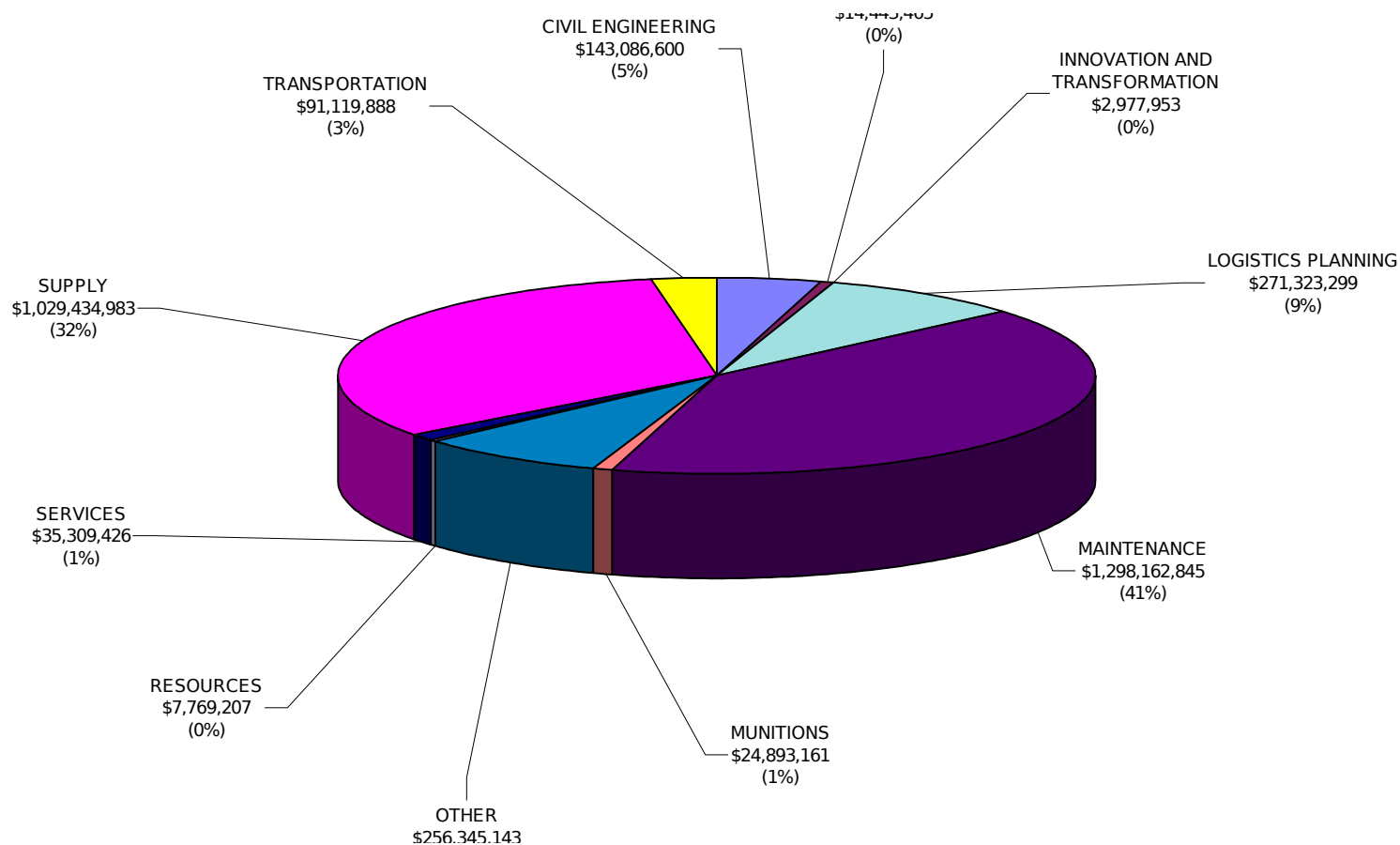
- Are included in the following functional categories:
 - Innovation and Transformation
 - Logistics Planning
 - Maintenance
 - Munitions
 - Other
 - Supply
 - Transportation
- Are in the top 100 by appropriation amount
- Are children of top 100
- Identified by Working Groups

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All identified systems (659)

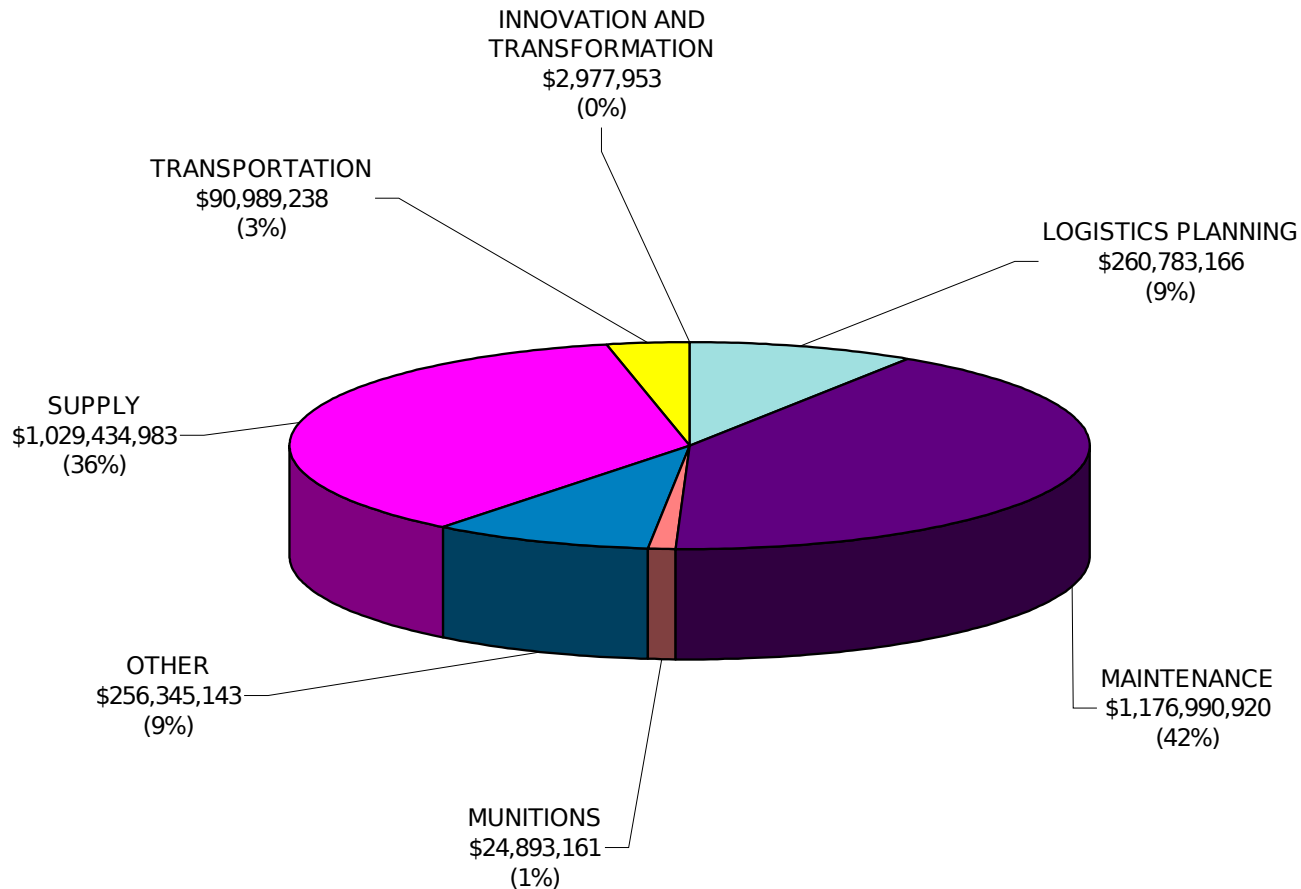


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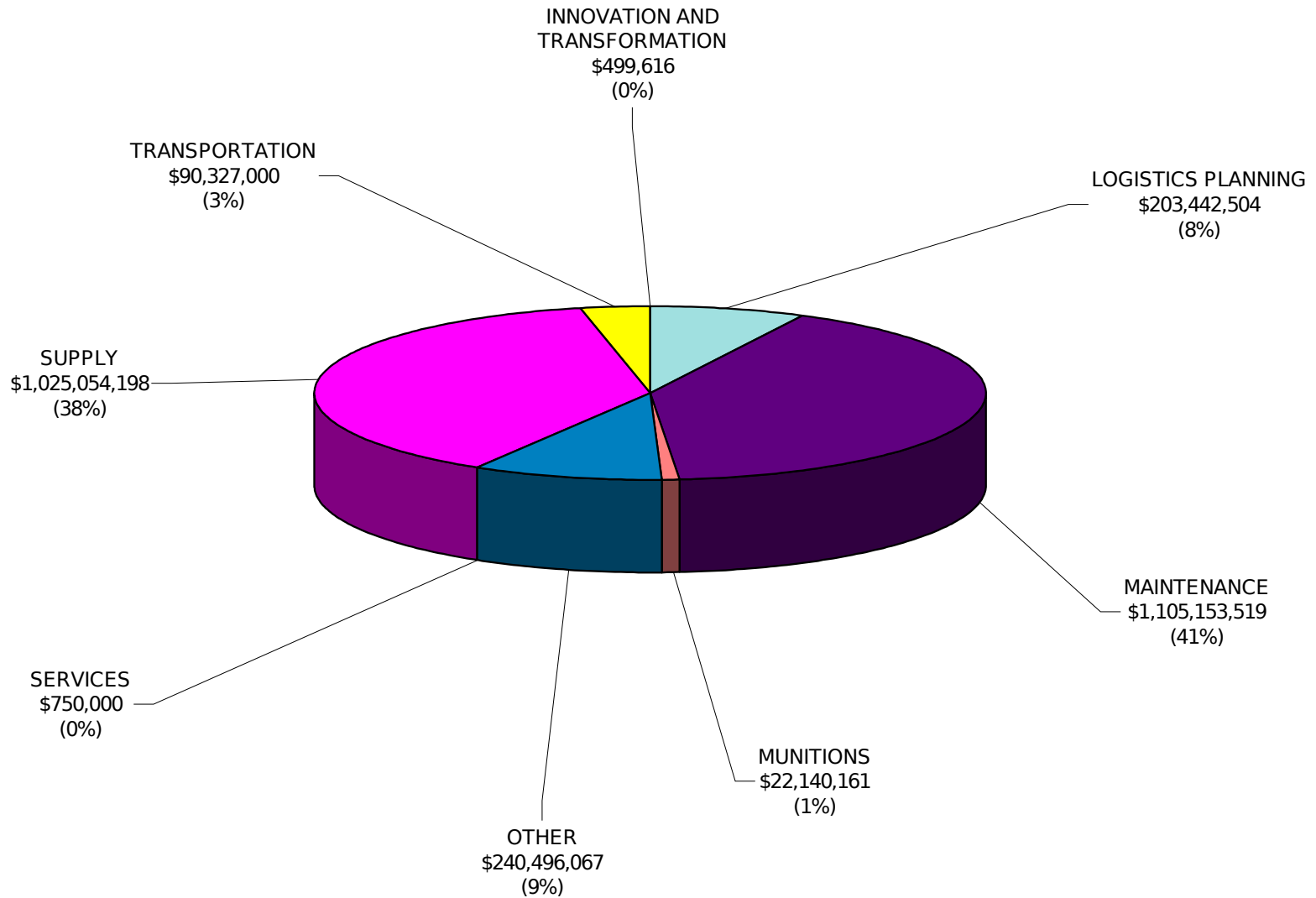
All in-scope systems (515)





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High Profile Systems (173)



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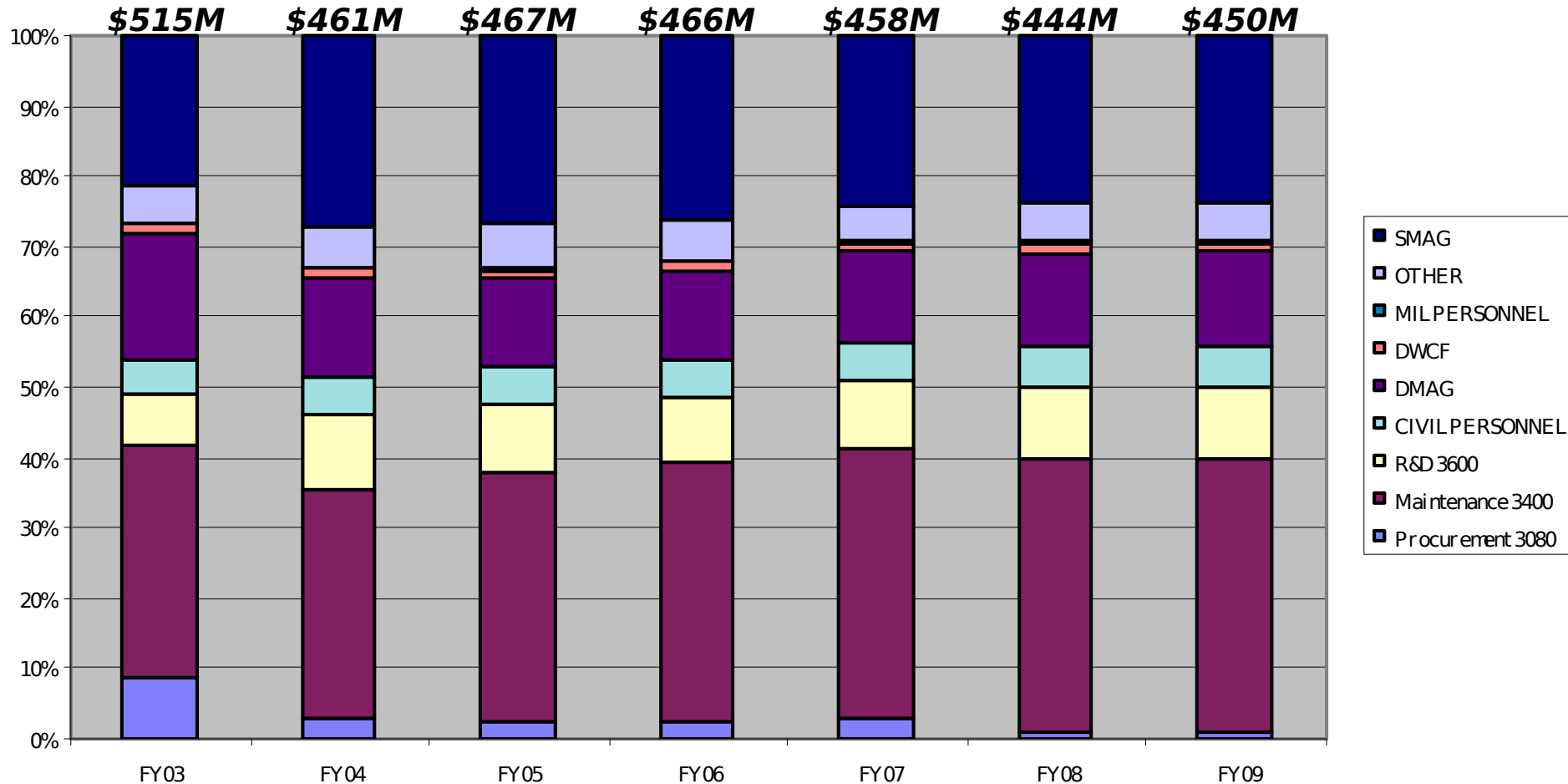


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Current State Appropriations

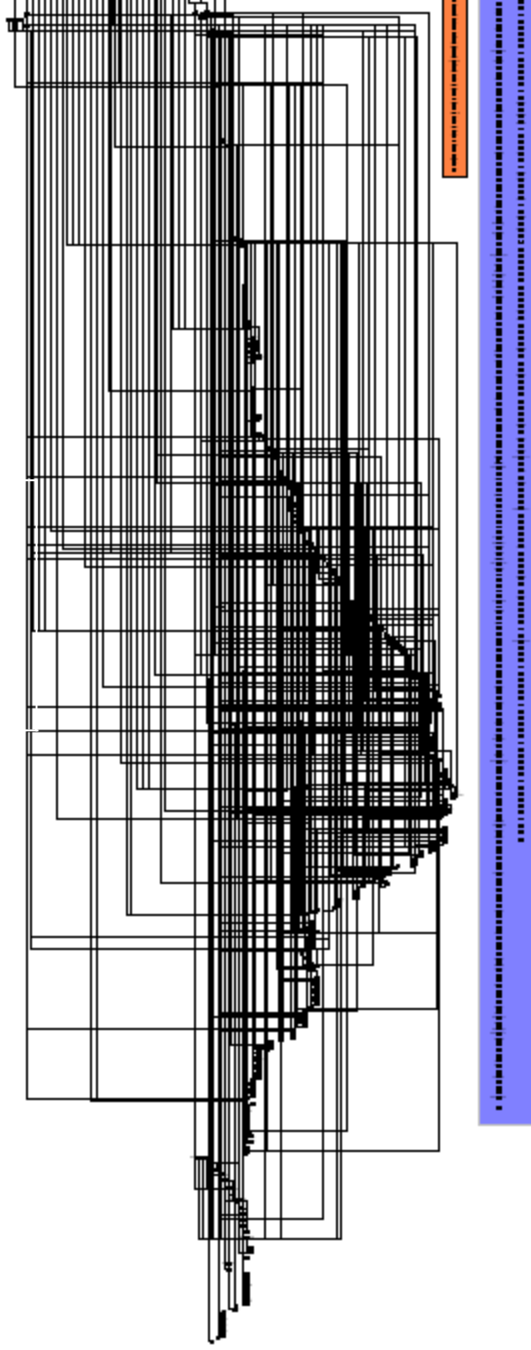


~~\$3.3 Billion FY03-FY09~~
Appropriations by Fiscal Year



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Current SV create
from completed
system surveys



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High Level Future State Systems Architecture



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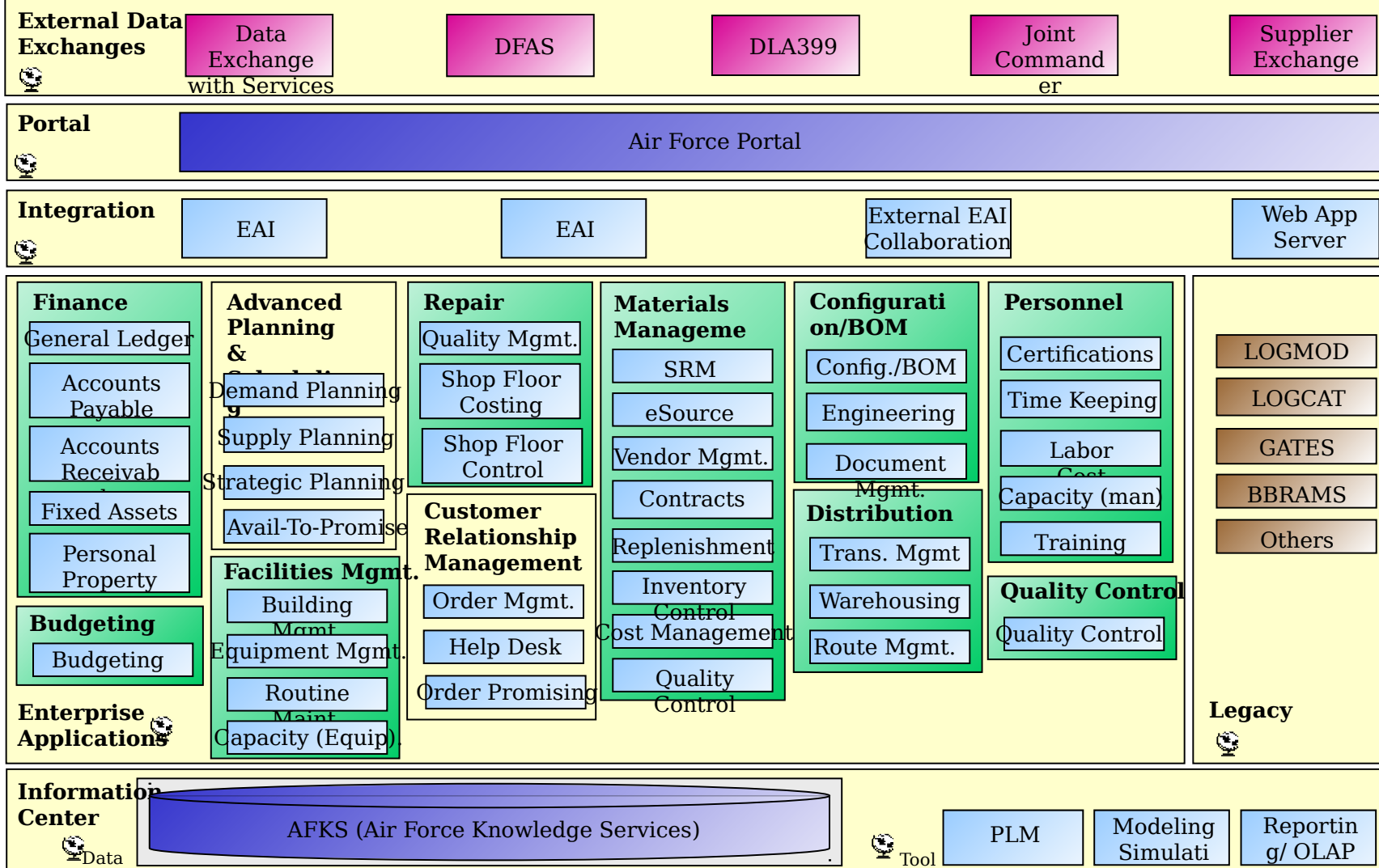
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eLog21 Future State Systems Architecture



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LogEA leverages GCSS-AF Technical Architecture

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Business Case Construct



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LogEA Solution Alternatives



Modernization

Description

Consolidate and modernize existing systems and integrate them.

- Legacy system driven solution.
- EAI (integration) is a considerable cost.
- Cross-functionality/ commonality will be key in consolidation and replication of systems.
- Change Management will be easier as compared to other alternatives.

Best-of-Breed

Description

Replace the existing portfolio through integration of functional Best-of-Breed COTS applications.

- This solution will rely heavily on EAI (integration) technology as legacy systems and new systems will be integrated.
- Costing for the Best-of-Breed will be at a premium for each module as functionality capability is highest and solutions purchases aren't packaged.

• Change Management will be significant across many functional applications.

Enterprise (ERP)

Description

Replace the existing portfolio with a core ERP system and limited COTS "bolt-ons" for specific functionality.

- ERP is the significant cost factor and drives cost model.
- EAI will be less due to inherent nature of ERP. Integration will be primarily with remaining legacy systems.
- Change Management will be significant few functional applications.



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Example: Current Systems in place

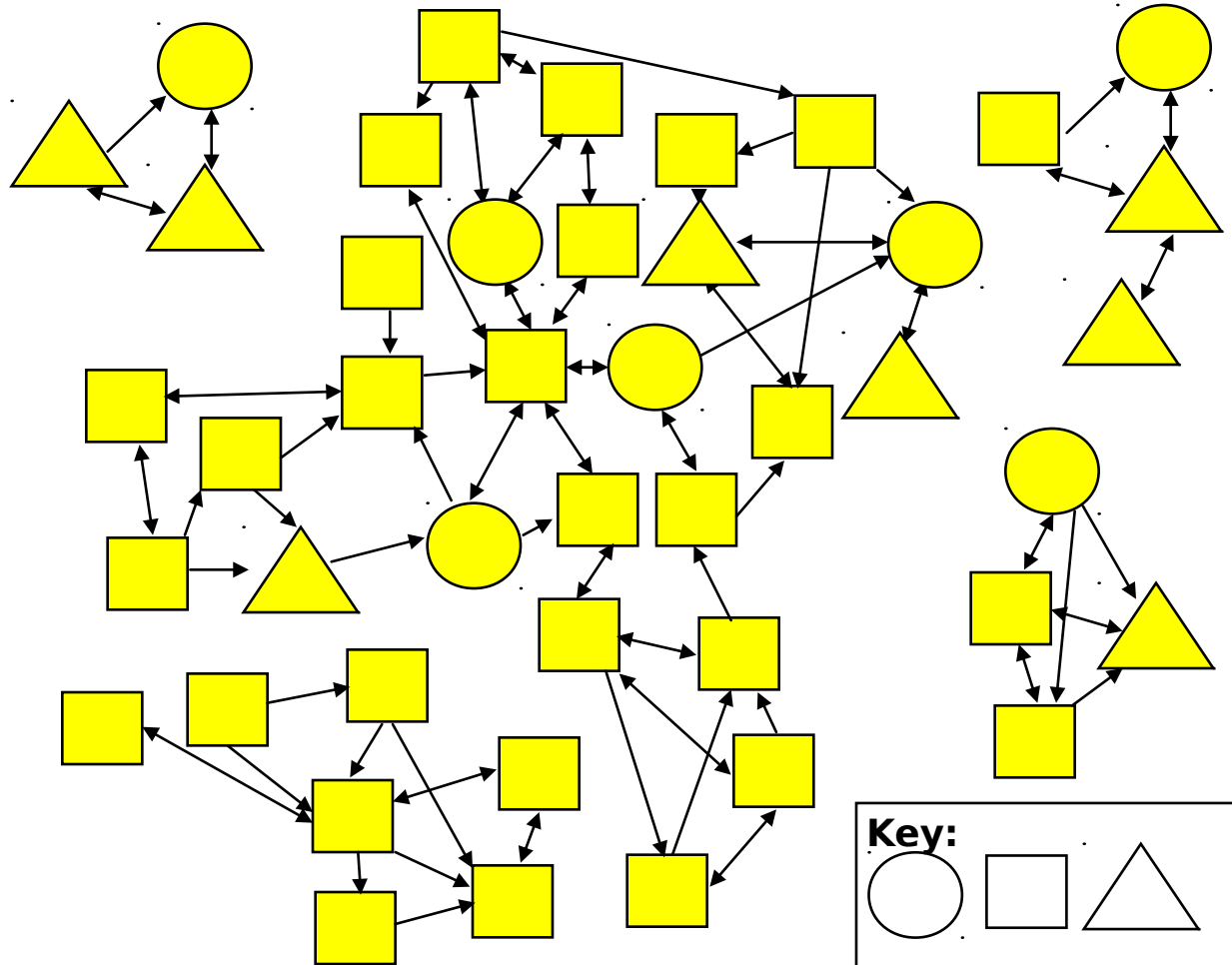


Current State

Description

Multiple Legacy systems with multiple point-to-point interfaces and with some systems groups isolated.

- Multiple point-to-point Legacy systems.
- Has gaps with future state functional and technical gaps.
- Isolated groups of systems where communications of information between groups are manual.
- Much manual entry.



Key:



= Systems/Modules



Example: Modernization



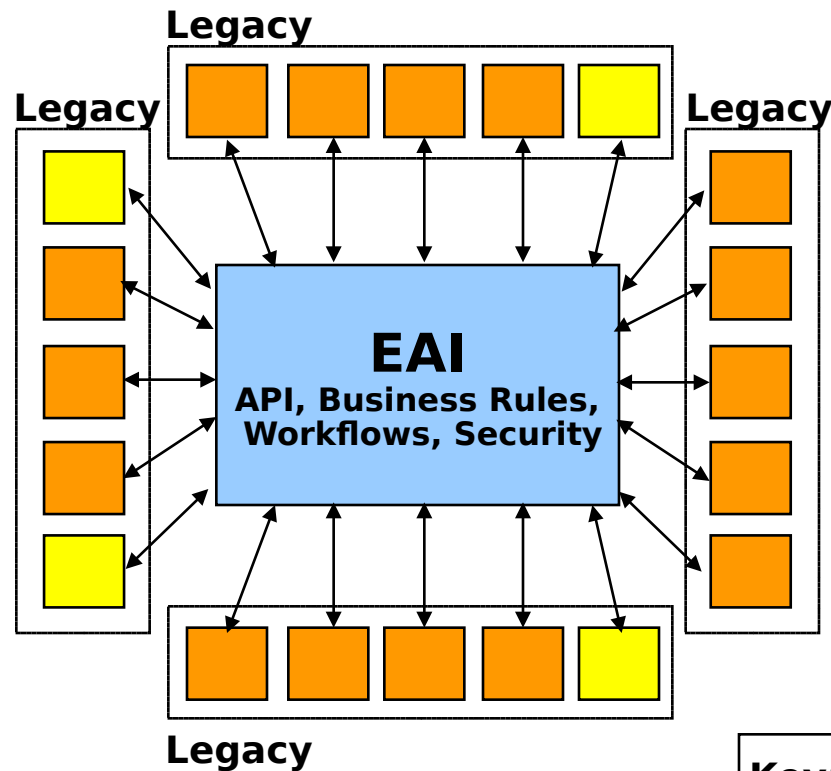
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Modernization

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Key:

 = System/Module



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Example: Best-of-Breed (BOB)



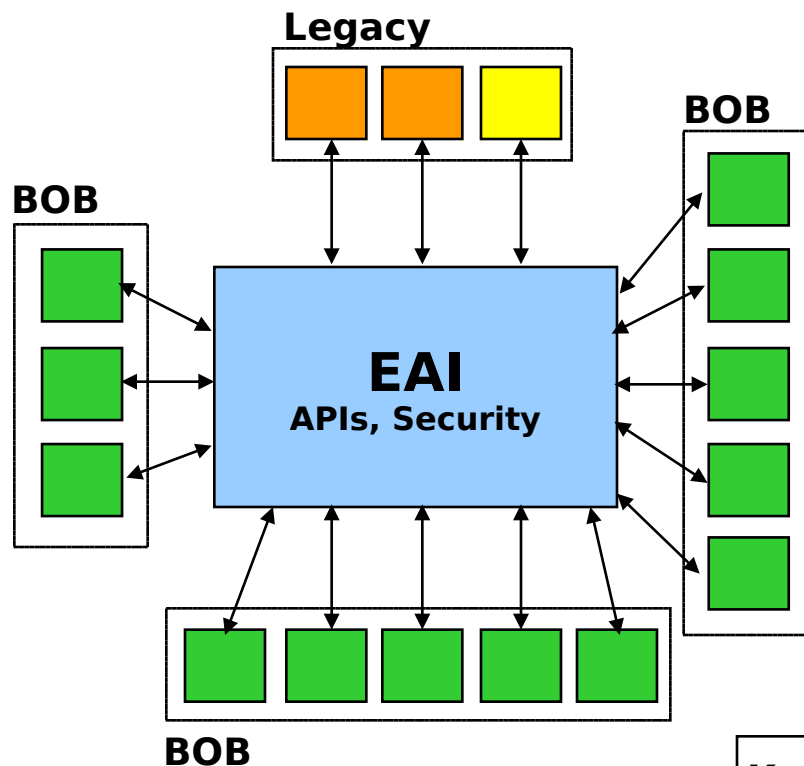
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Key:

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Example: Enterprise (ERP)

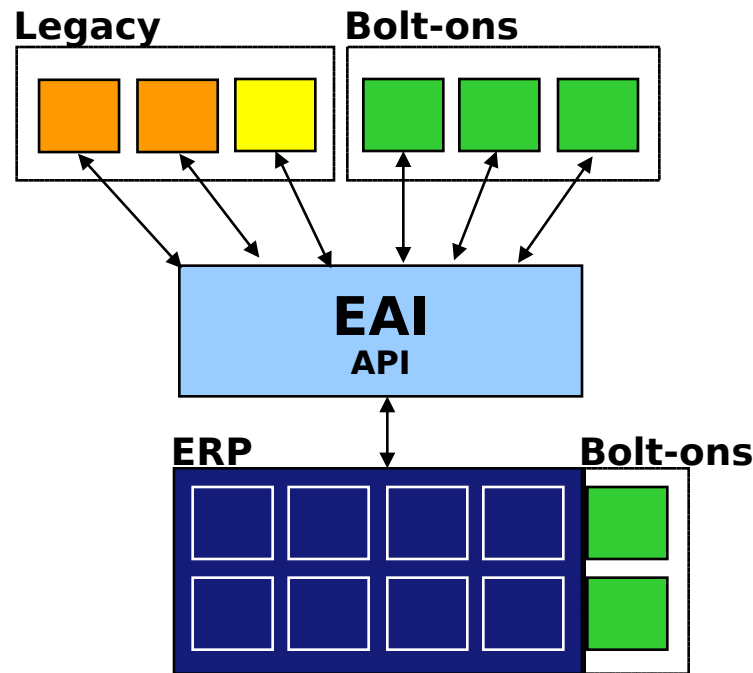


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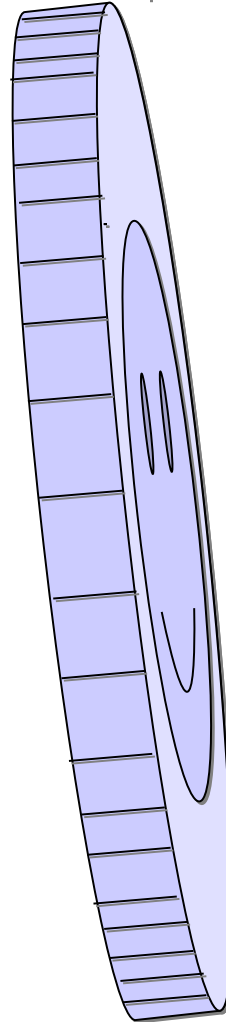


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Business Case



***Functional
Business
Case***



***Financial
Business
Case***

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Functional Business Case



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Functional Gap Assessment



Background:

- **Future State decomposed to 436 process attributes**
- **5 workshops were held with subgroups of AWG members and SMEs for major SCOR processes**
- **Assessments were collected at the class-of-material level (consumables, reparables, fuels, munitions, vehicles, equipment)**
- **Assessed current processes and systems ability to fulfill future state attributes**
- **Explanatory information was more revealing than yes / no**
- **Identified AF unique and/or best-in-class processes and systems**



Current State Gaps



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1. Absence of an enterprise view

- Warfighter requirements and logistics capabilities poorly linked
- Conflicting performance metrics across organizations and functions

2. Fragmented planning processes

- Lack of centralized Supply Chain planning process
- Planning across functions and organizations not coordinated
- Unresponsive planning and re-planning processes

3. Lack of integration

- Limited visibility of resources and capacity across the enterprise
- Limited predictive or causal analysis capability
- Disconnect from Suppliers (internal and external)

4. No enterprise systems strategy

- Proliferation of non-integrated IT tools (county options)
- No logistics portfolio management
- Numerous unsynchronized data handoffs and data gaps
- Multiple data models

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Financial Business Case



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Financial Business Case Approach



Resources:

- **Best Practice Standards**
- **Subject Matter Experts (SMEs)**
- **Industry Benchmarks**
- **Gartner Group/AMR Studies**
- **Historical Projects/Data**

Tools/Templates

- **Implementation Sizing Model**
 - **Template driven from BE experience utilized for implementation sizing and estimation**
- **QSM Software Lifecycle Model (SLIM)**
 - **Developed by Lawrence H. Putnam at QSM (Quantitative Software Management), Inc., SLIM is a quantitative software estimation model grounded in more than 25 years of software research experience and based on a historical database of over 4,000 projects of all sizes and types, including Government Enterprise Solution projects.**

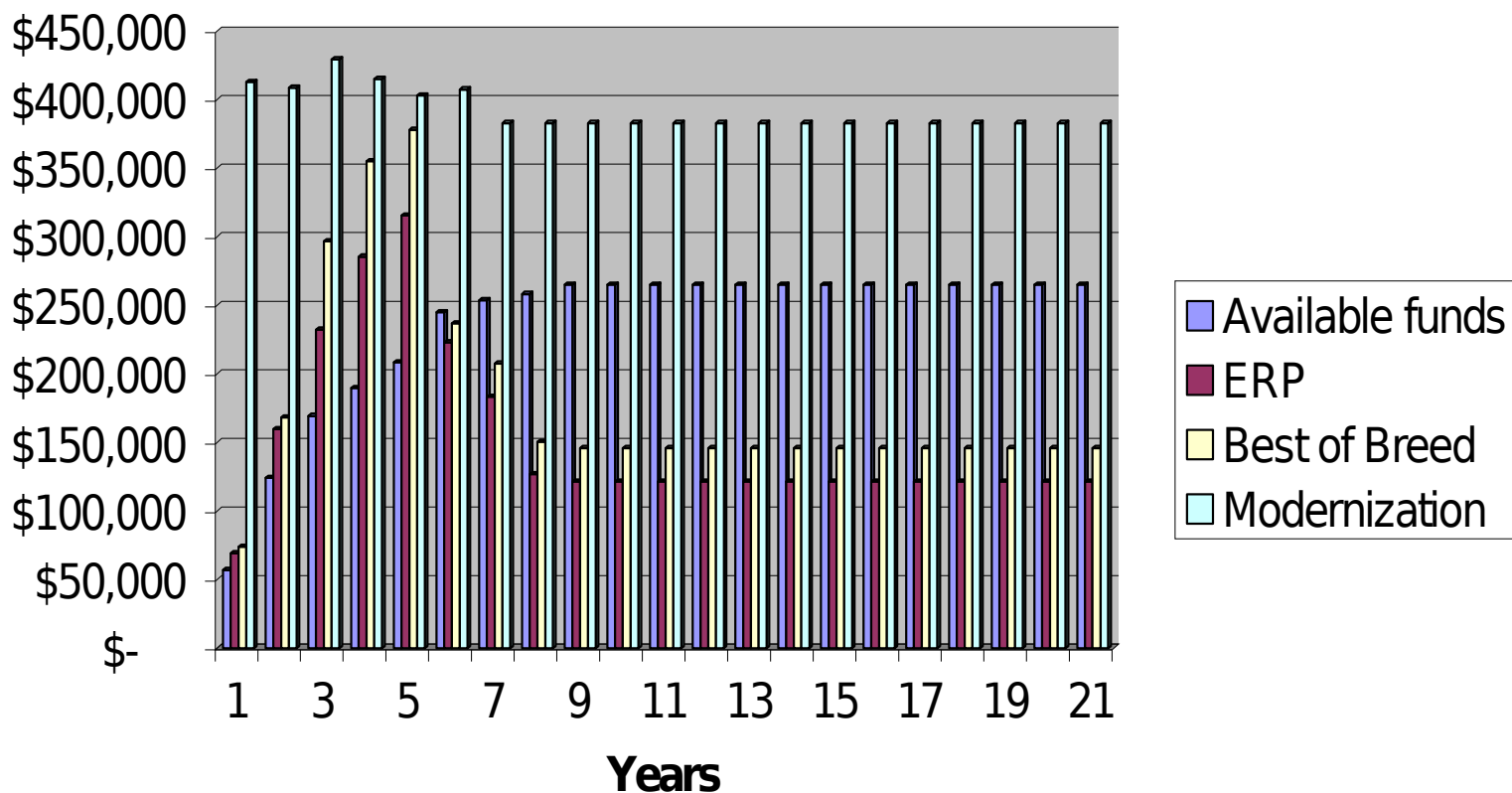


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Business Case Opportunity Costs



Cost per Year



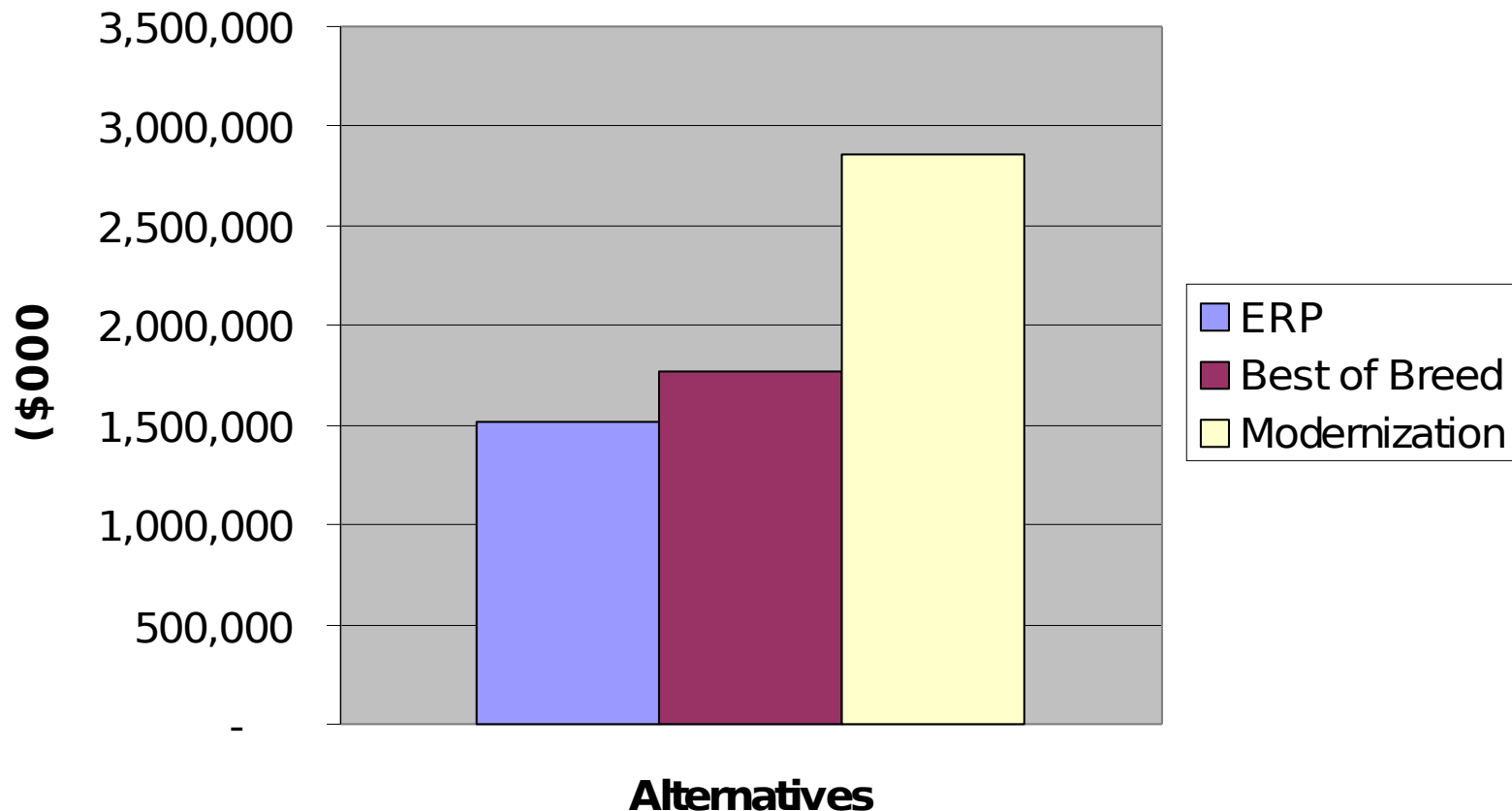


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Business Case Opportunity Costs



7 Year Cost Comparison



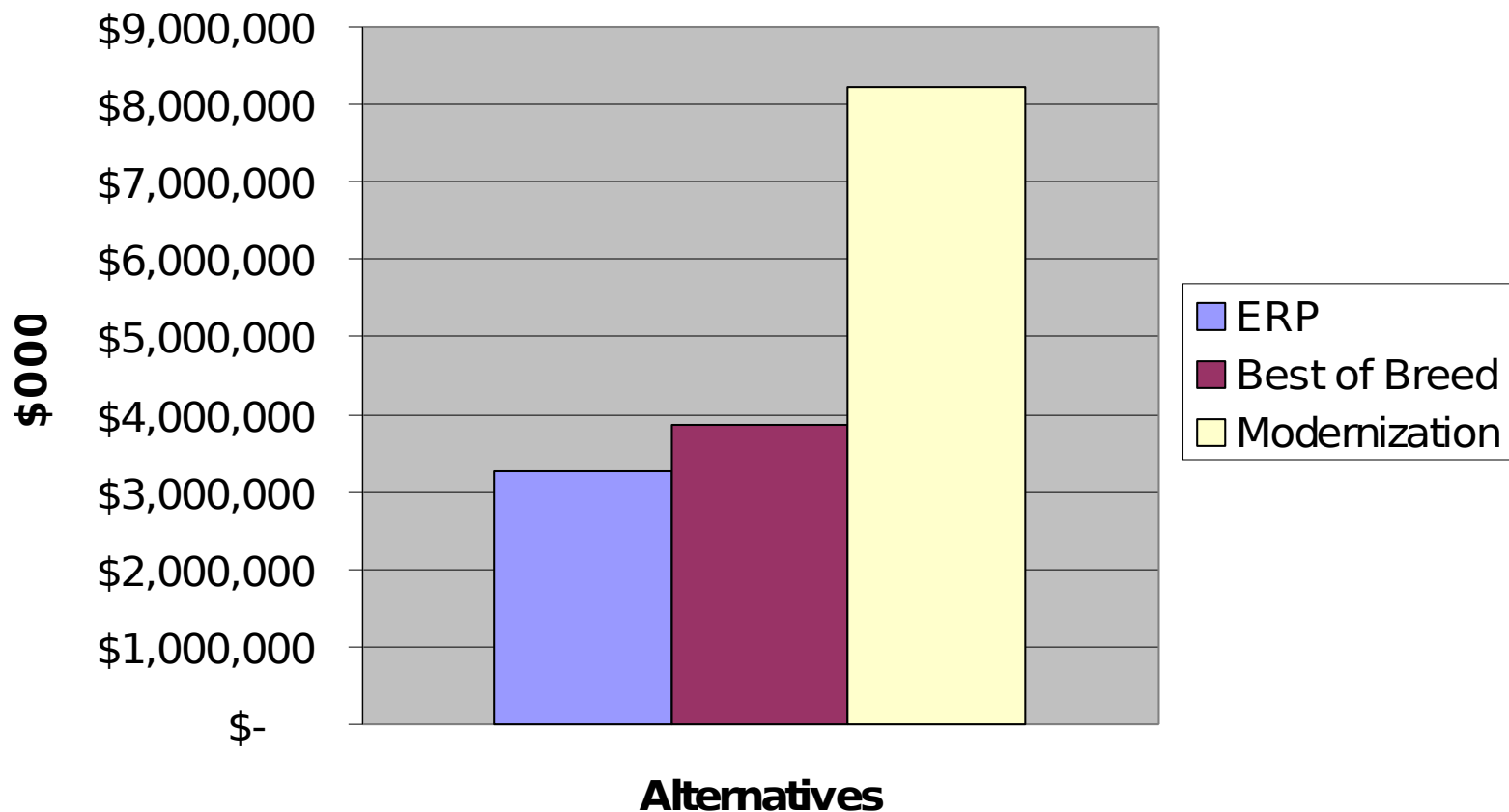


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Business Case Opportunity Costs



21 Year Cost Comparison



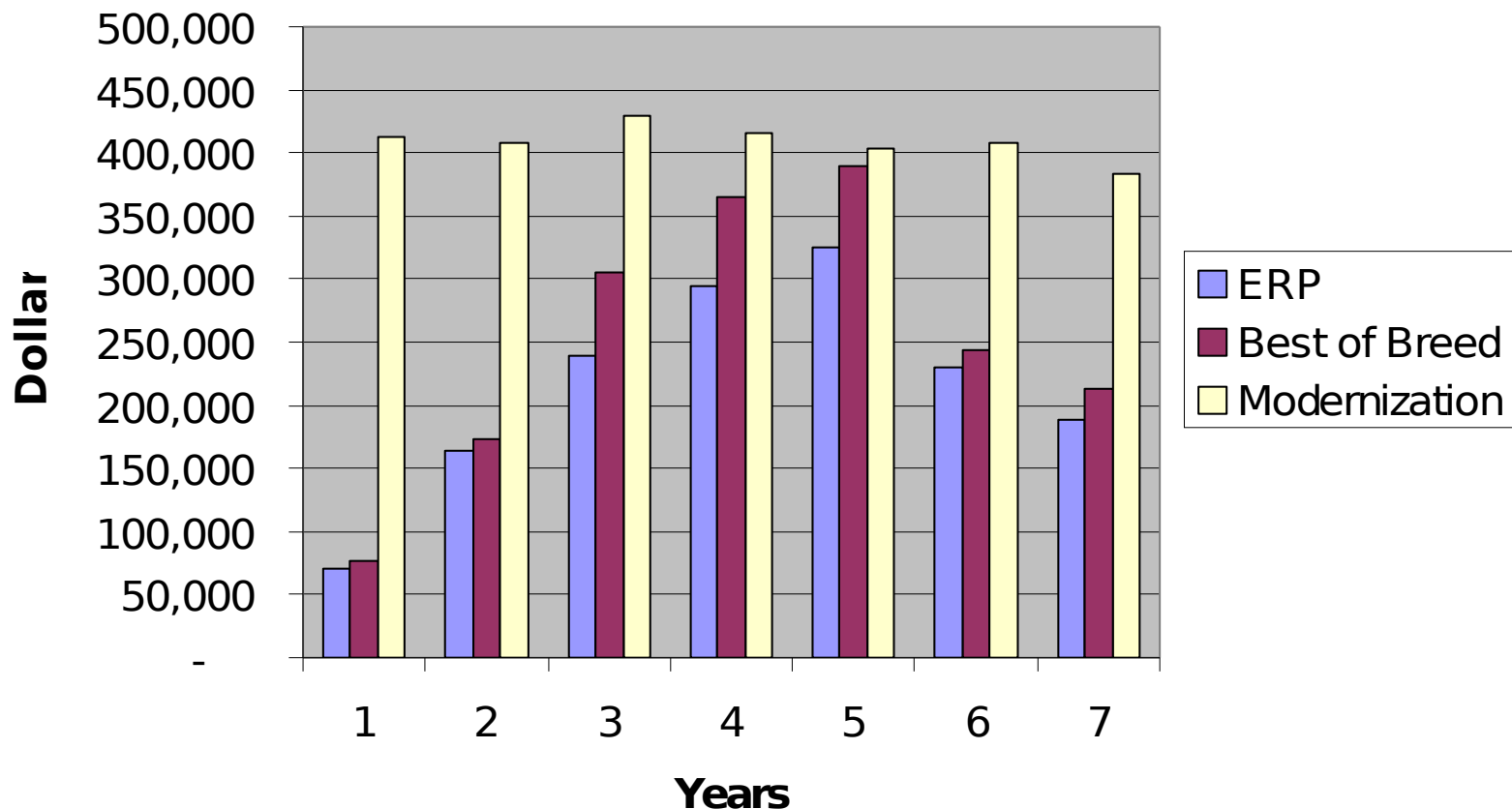


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Business Case Opportunity Costs



Total Implementation Cost Comparison Per Year



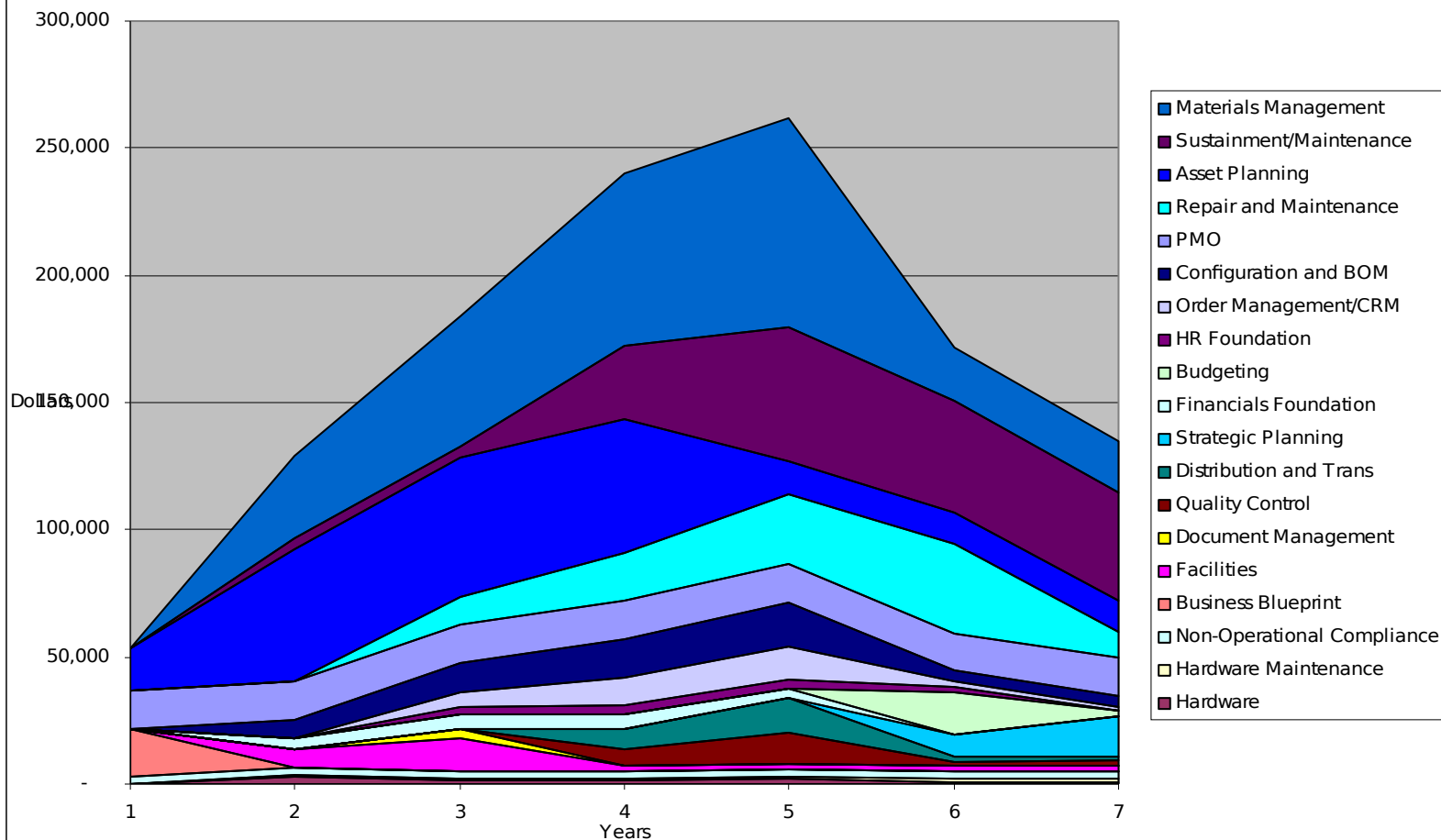


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ERP Cost Components



ERP Summary by Phase



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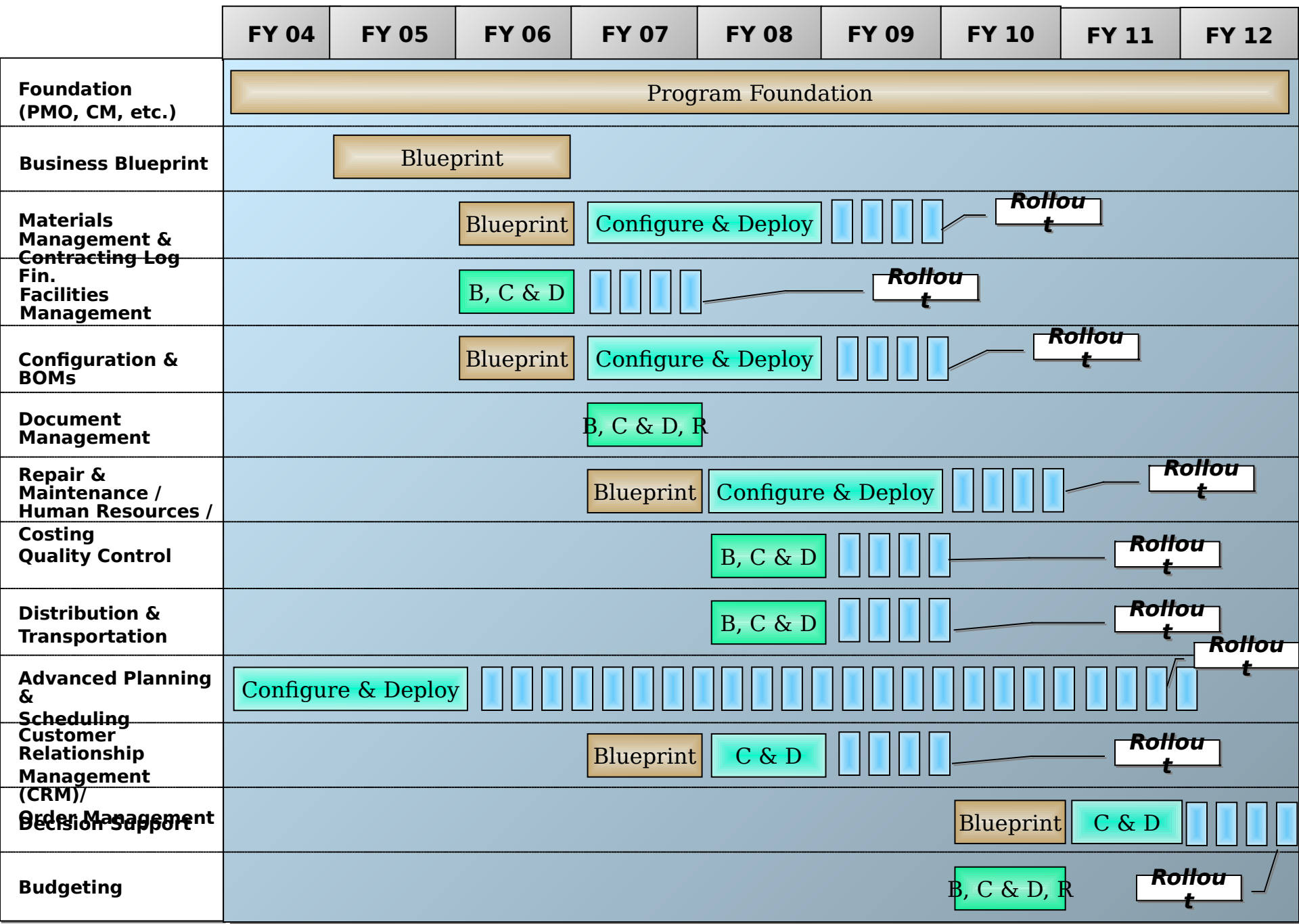
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Transition Plan Approach



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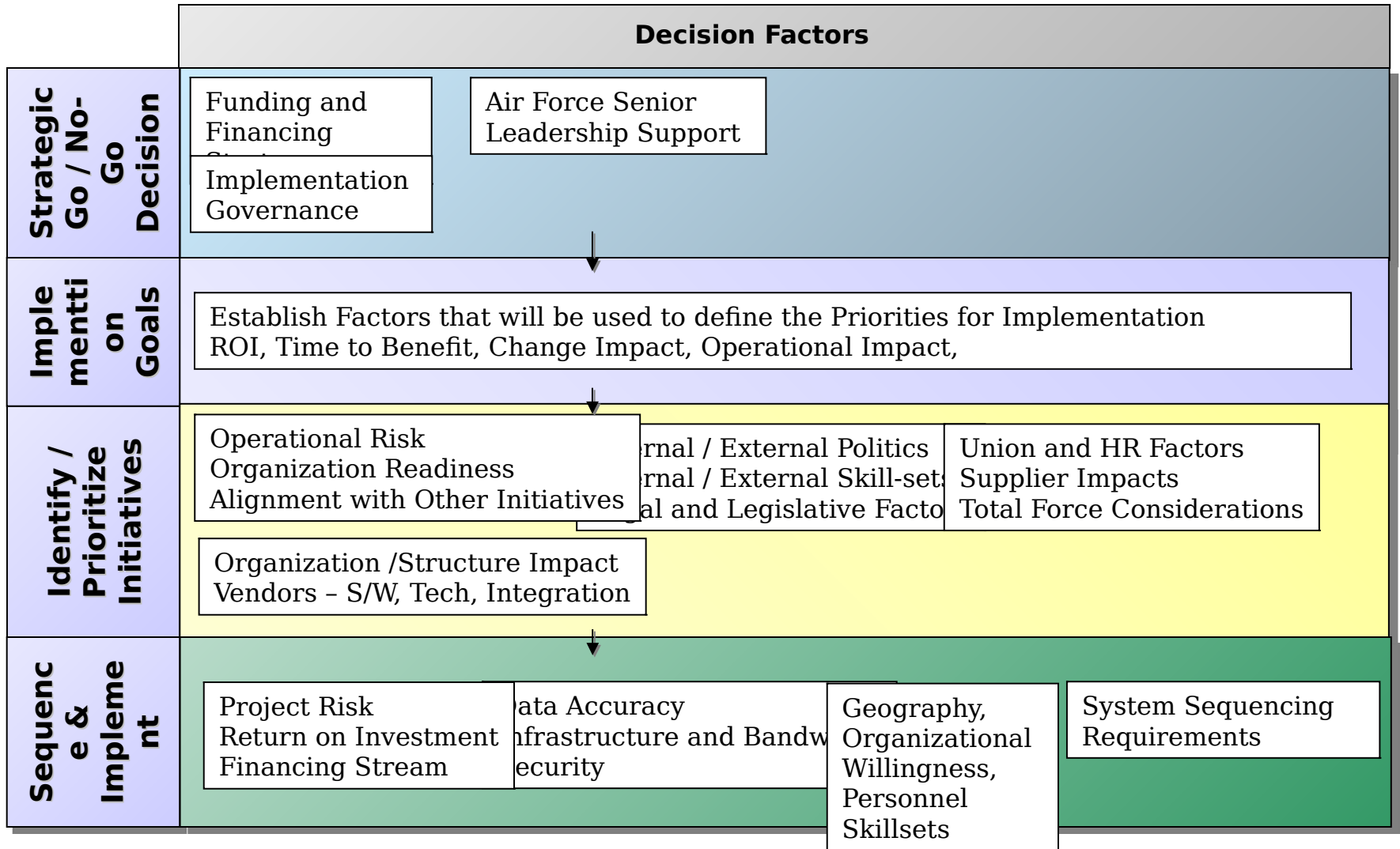




Referenced TP Factors to Determine Block Sequence



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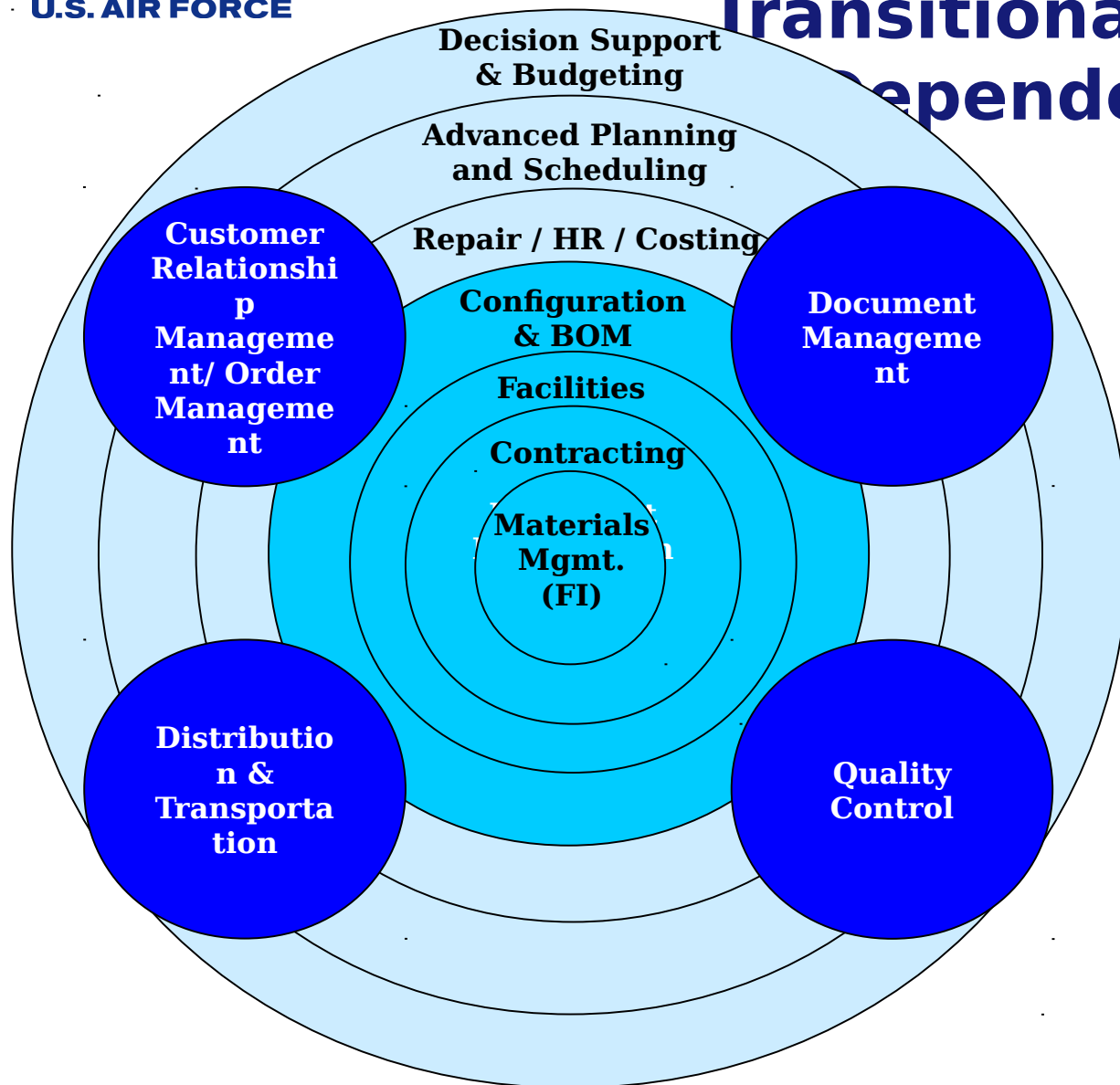


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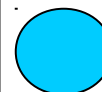


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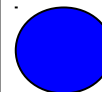
Dependencies and Priorities: Transitional Plan Dependencies



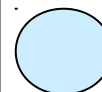
GRAPH KEY:



Fundamental Functions (need to be rolled out first)
Independent



Functions (Can be rolled out anytime after the Fundamental Functions are rolled out)
Sequential



Functions (functions that need to be rolled out in sequence)

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Wrap Up



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